

Fig. 2

DC Alignment:
 1 AATP1_A.T.
 2 AATP2_A.t.
 3 TLC_

3/8

| | | | | | | |
|-----|--|-----|-----|-----|-----|-----|
| 10 | 20 | 30 | 40 | 50 | 60 | |
| 1 | MEAVIQTRGLLSLPTKPIGVRSQLQPSHGLKQRLFAAKPRNLHGCLYPLTGTRNFKPLSQ | | | | | 60 |
| 2 | MEGLIQTRGILSLPASHR-SEKVLQPSHGLKQRLFTTN--LPALSLSLMVTRNFKPF SK | | | | | 56 |
| 3 | -----MS-----TSK-----SENY--LS- 11 | | | | | |
| 70 | 80 | 90 | 100 | 110 | 120 | |
| 1 | PCMGRFRPTKREAPSSYARRRRGCWRRSCLRRSDSAAVVASRKIFGVEVATLKKIPLGL | | | | | 120 |
| 2 | SHLGFRFPTRREAEDSLARRKLRRPRRKCVDEGDTAAMA VSPKIFGVEVTLKKIVPLGL | | | | | 116 |
| 3 | -----EL-----RKIWP-----IEQYENKKFLPLAF 33 | | | | | |
| 130 | 140 | 150 | 160 | 170 | 180 | |
| 1 | MFFCILFNYTILRDTKDVLVVTAKGSSAEIIPFLKTWVNLPMAIGFMLLYTKLSNVLSKK | | | | | 180 |
| 2 | MFFCILFNYTILRDTKDVLVVTAKGSSAEIIPFLKTWVNVPMAIGFMLLYTKLSNVLSKK | | | | | 176 |
| 3 | MMFCILLNYSTLRSIKDGFVVTDIG-T-ESISFLKTYIVLPSAVIAMITYVKLCDILKQE | | | | | 91 |
| 190 | 200 | 210 | 220 | 230 | 240 | |
| 1 | ALFYTVIVPFIYFGGFGFVMYPLSNYIHPEALADKLTTLGPRFMGPAILRIWSFCLF | | | | | 240 |
| 2 | ALFYTVIVPFIYFGGFGFVMYPRSNLIQPEALADKLATLGPRFMGPALMRIWSFCLF | | | | | 236 |
| 3 | NVFYVITSFFLGYFALFAFVLYPYPDLVHPDHKTIESLSLAYPNFKWFIVGKWSFASF 151 | | | | | |
| 250 | 260 | 270 | 280 | 290 | 300 | |
| 1 | YVMAELWGSVVSVLFWGFANQITTVDEAKKFYPLFGIGANVALIFSGRTVKYFSNLRKN | | | | | 300 |
| 2 | YVMAELWGSVVSVLFWGFANQITTVDEAKKFYPLFGLGANVALIFSGRTVKYFSNMRKN | | | | | 296 |
| 3 | YTIAELWGTMMMSLLFWQFANQITKIAEAKRFYSMFGLLANLALPVTSVVIGYFLHEKTQ | | | | | 211 |
| 310 | 320 | 330 | 340 | 350 | 360 | |
| 1 | LGPGVDGSFV--ESHDEHCNGNGTRICLSSIGGSNRYV--P-L--PTRSKNKKEPKMGT | | | | | 352 |
| 2 | LGPGVDGWAWSLKAMMSIVVGMLAICFLYWWVNRYV--P-L--PTRSKKKVKPQMG | | | | | 350 |
| 3 | I-VAEHLKFV--PLFVIMITSSFLIILTYRWMNKNVLTDPRLYDPALVKEKKTAKLSF 267 | | | | | |
| 370 | 380 | 390 | 400 | 410 | 420 | |
| 1 | MESLKFLVSSPYIRDLATLVA YGISINLVEVTWKS KLKAQFPSPNEYSAFMGAFSTCTG | | | | | 412 |
| 2 | MESLKFLVSSPYIRDLATLVA YGISINLVEVTWKS KLKSQFPSPNEYSAFMGDFSTCTG | | | | | 410 |
| 3 | IESLKMIFTSKYVGYIALLIA YGVSVNLVEGVWKS KVKELYPTKEA YTIYMGQFQFYQG 327 | | | | | |
| 430 | 440 | 450 | 460 | 470 | 480 | |
| 1 | VATFTMMILLSQYVFNKYWGVAAKITPTVLLTGVAFFSLILFGGPFA-PLVAKLGMTP | | | | | 471 |
| 2 | IATFTMMILLSQYVFKKYWGVAAKITPTVLLTGVAFFSLILFGGPFA-PLVAKLGMTP | | | | | 469 |
| 3 | WVAIAFMLIGSNILRKVSWLTAAMITPLMMFITGAFFSFIFFD SVIAMNLTGILASSPL 387 | | | | | |
| 490 | 500 | 510 | 520 | 530 | 540 | |
| 1 | LAAYVVGALQNF SK-SAKYSLFDPC KEMAYIPLDED T KVKGKAIDVVCNPLGKSGGAL | | | | | 530 |
| 2 | LAAYVVPPEVSSARVQVQHSSTPSAMQECLYPLDEVSKVAKLQL-MWSATIGKSGGAL | | | | | 528 |
| 3 | TLAVMIGMIQNVL SK-GVKYSLFDATKNMAYIPLDKDLRVKGQAAVEVIGGRLGKSGGAI 446 | | | | | |
| 550 | 560 | 570 | 580 | 590 | 600 | |
| 1 | IQQ-FMIL--SFGSLANSTPYLGMILLVIVTAWAAKSLEGQFNSRLKKS LRRK WREL | | | | | 587 |
| 2 | IQQ-FMIL--TGFSLANSTPYLGVILLGIVTAWAAKSLEGPV----- 569 | | | | | |
| 3 | IQSTFFILFPVFGFI-EATPYFASIFFIIVLWIFAVKGLNKEYQVL-VNKNEK----- 498 | | | | | |

1 HR 589
 2 -- 569
 3 -- 498

Fig. 3

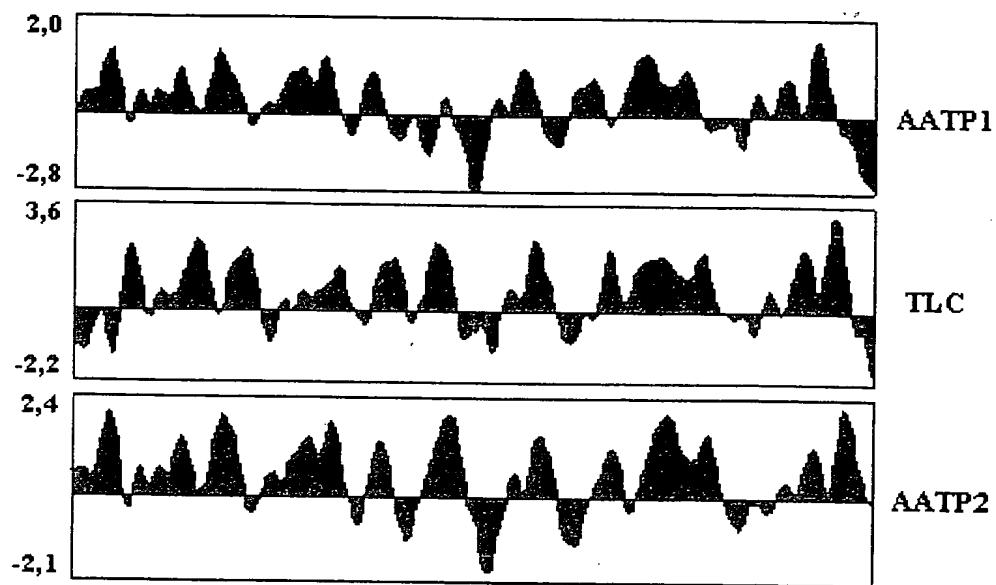


Fig. 4

5/8

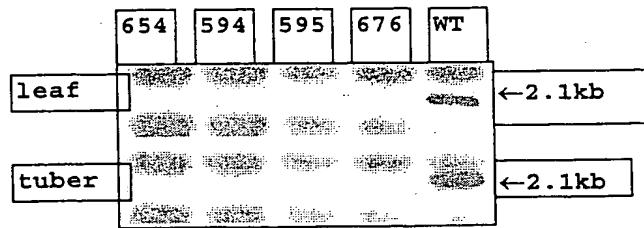


Fig. 5

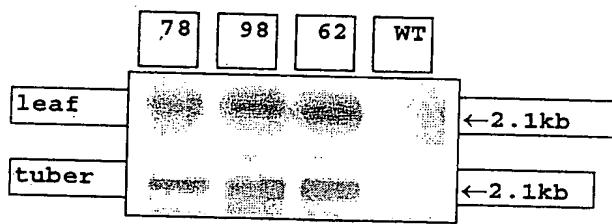


Fig. 6

6/8

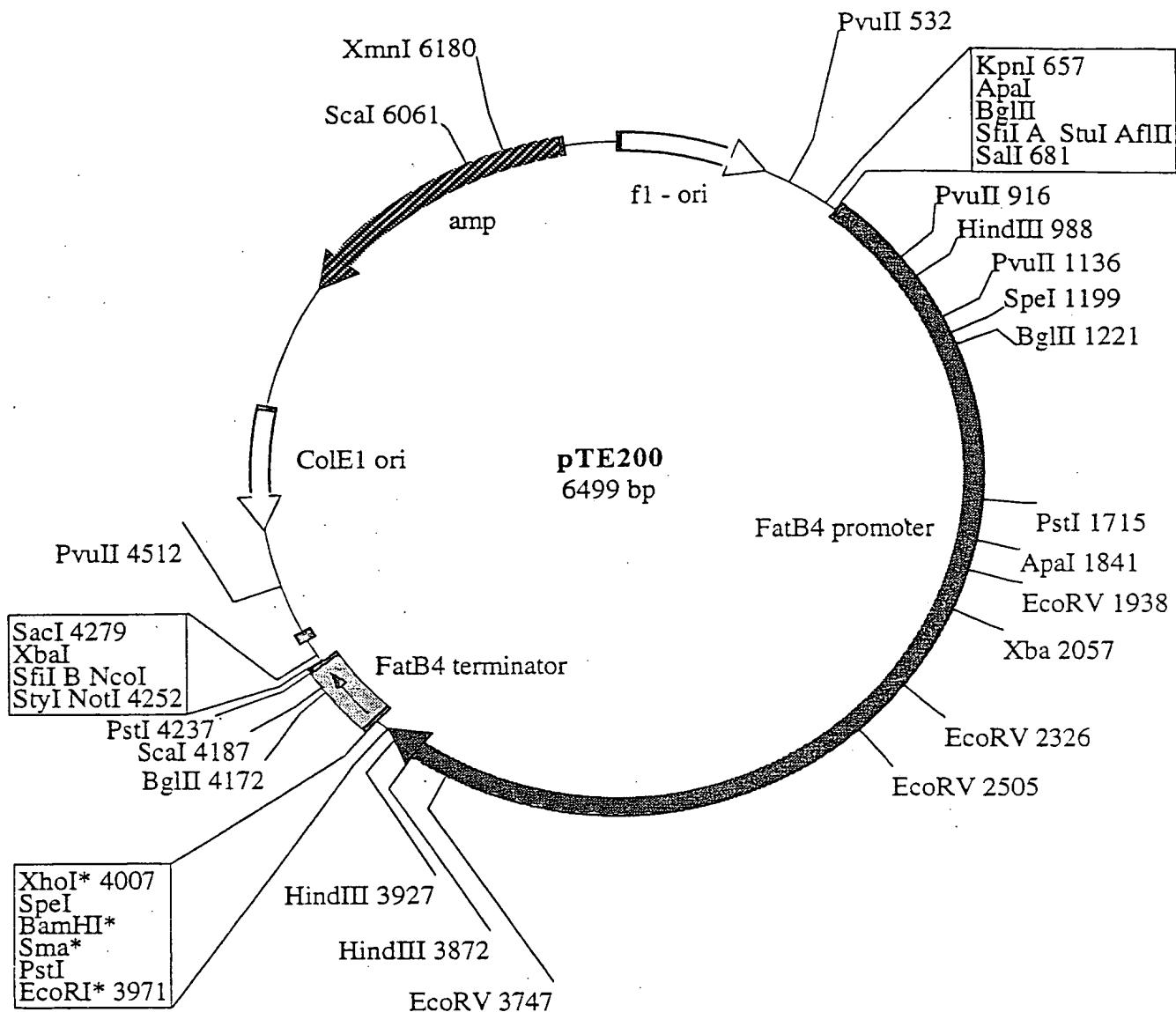


Fig. 7

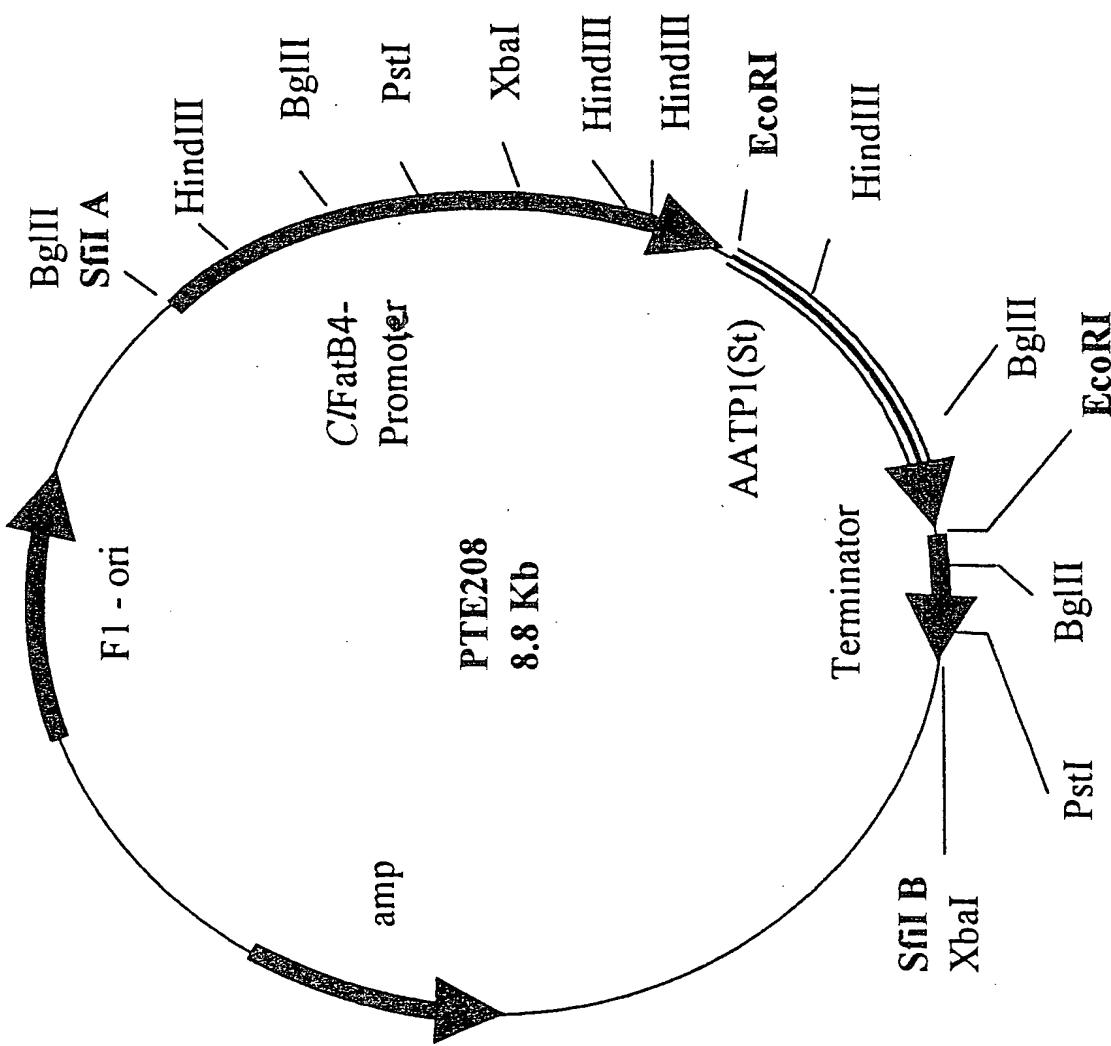


Fig. 8

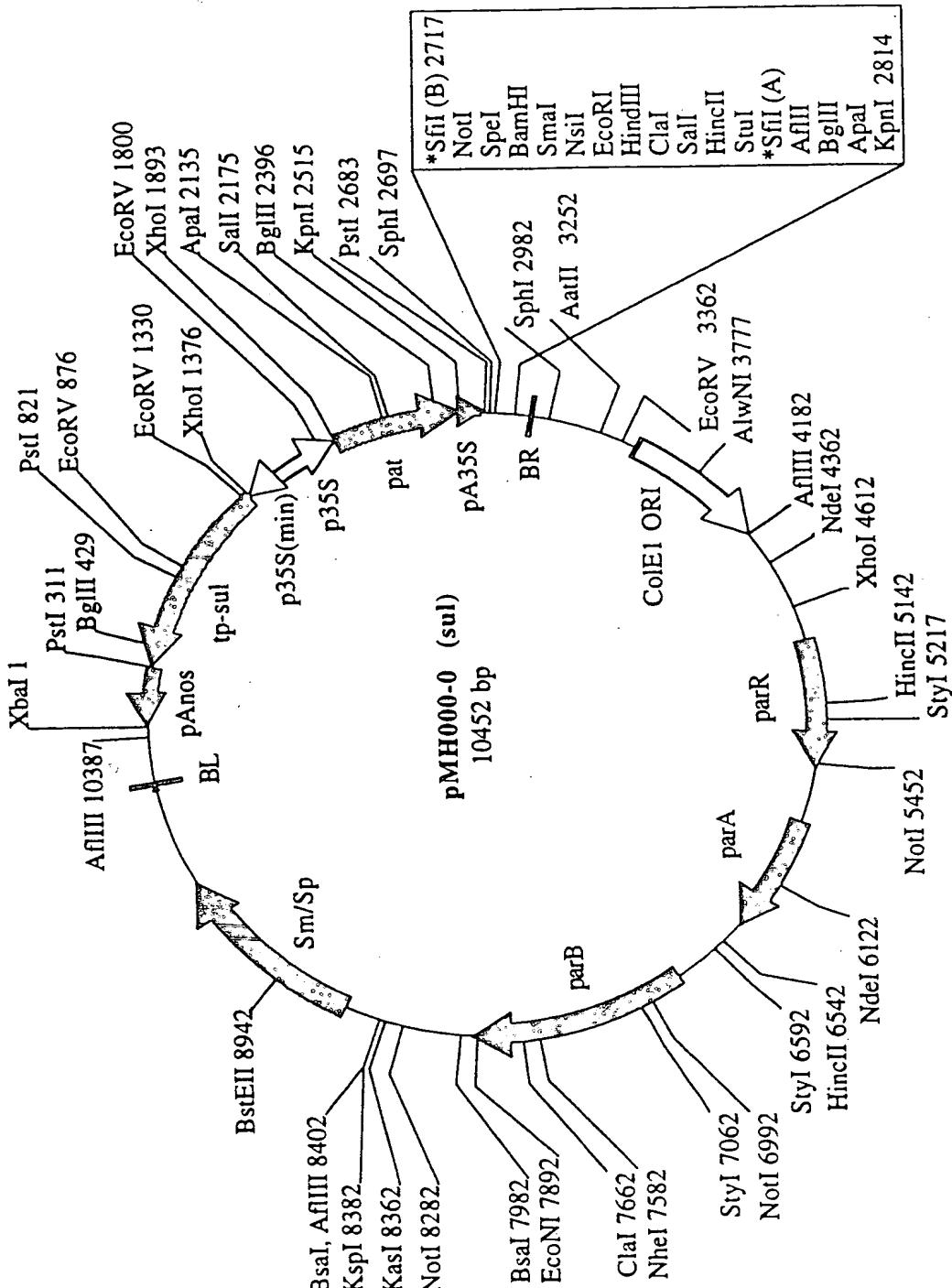


Fig. 9